

BENCHMARKS

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NORTH TEXAS STATE UNIVERSITY

JANUARY 1982

*BENCHMARKS was produced using MUSIC/SCRIPT

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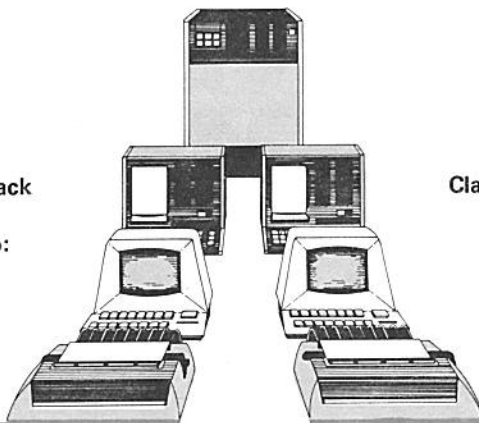
BENCHMARKS Reader/User feedback
is encouraged.

Send all letters, suggestions, etc., to:
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SERVICES AVAILABLE TO USERS OF THE NTSU COMPUTING FACILITIES

All people mentioned below may be contacted by calling (817) 788-2324 may be contacted by calling (817) 788-2586.

Information and Project Numbers - Sandy Franklin or Sue Heffley in the Computing Center Reception Area, ISB 119

Test Scoring and Analysis - Sue Heffley or Sandy Franklin

Newsletter Questions/Contributions/etc. - Claudia Putnam

Statistical/Research Support (provided for graduate students and faculty members) - Bob Brookshire, George Morrow, Claudia Putnam, Abdi Salahshour and Mohamad Salahshour.

Non-Research Student Programming Problems - student consultants from the Computer Science Department found in ISB 134A near dispatch and the user keypunch area. Student consulting provided by the College of Business is available at the BA Computing Access Facility.

JCL and Debugging Problems - Abdi or Mohammad Salahshour.

Pre-Research Counseling, Including Survey Instrument Design - Bob Brookshire, George Morrow, and Claudia Putnam.

Keypunch Requests and Questions Regarding Layout of Keypunch Sheets - Betty Grise, ISB 227.

Academic Timesharing Information and/or Problems HP/2000 and AS/5000 MUSIC (McGill University System for Interactive Computing) information and problems, including terminal problems - Abdi Salahshour.

Administrative Applications - Coy Hoggard.

AS/5000 Computer Hardware/Software/Billing Problems - Sandy Franklin.

JOB Submission and Retrieval - RJE operators.

SPRING COMPUTING HOURS

Computing facilities will be open during the following times throughout the Spring Semester (not applicable to holidays):

Computing Center RJE: 24 hours a day, starting Monday 7:30 AM, close Saturday Midnight; Noon to Midnight Sunday.

College of Business RJE: 8:00 AM to Midnight, Monday through Saturday; Noon to Midnight Sunday.

Media Library(GAB): 8:00 AM to 12:00 PM Monday through Thursday; 8:00 AM to 6:00 PM Friday; 11:00 AM to 5:00 PM Saturday; 4:00 PM to 12:00 PM Sunday. The 12:00 closings begin February 1, prior to that the closings are at 10:00.

DIRECTIONS

During the next year computing services generally, and The Computing Center in particular, will be traveling in exciting new directions. In late December 1982 or early January 1983, the computing equipment will be moved to a brand new facility on the fifth floor of the General Academic Building (GAB). That move will be accompanied by a 2 million dollar upgrade of our computing machinery, although the specific configuration has not yet been fixed. Since we will all be heavily dependent on fast and reliable data communications when the new facility comes on-line, we are working to develop an appropriate system--quite likely a broad band local area network.

The need for planning for new equipment and services will not keep us from seeking to expand and improve our current services. During the past year we have added additional disk capability, new software, and additional terminal ports. During 1982 we intend to continue to upgrade our software holdings and expand our development efforts. In much of our work we have the active participation and support of your University Computing Council which is designed to assist us to better serve the needs of the campus. Your active cooperation in helping us make the NTSU computing system more responsive to the needs of everyone will be greatly appreciated.

#####

MORE... ERRORS

The article on Waterloo Script in the Nov/Dec BENCHMARKS, "Waterloo Script Available in Batch Mode" has an error in it (can you believe it?). The execute card should read:

```
// EXEC SCRIPTMN, MEM=member, RGNSIZE=region, PROG=program
```

The N in SCRIPTMN was left out in the original article.

In this same article, the computer operator seems to have been sending subliminal messages to all newsletter readers. The following message appeared, uninvited, in the text:

```
*$$$$ OUR JOB QUEUE IS FULL - PLEASE PURGE ANY UNWANTED PRINTOUT
```

How many of you felt an unexplained need to enter OSJR and purge output?

#####

LAST MONTH FOR INDISCRIMINANT DISTRIBUTION OF BENCHMARKS

In order to facilitate the distribution of BENCHMARKS, it has become necessary to require people to subscribe to it, free of charge. This has become a necessity due to the inefficiency of the distribution methods used in the past in terms of target populations. People who needed and wanted to read BENCHMARKS were not getting access to it, and vice versa. A subscription form is found in the back of this issue, and all non-subscribers are urged to sign up.

THIS IS THE LAST MONTH THAT BENCHMARKS WILL BE MAILED OUT (EITHER THROUGH CAMPUS OR OFF-CAMPUS MAIL) TO NON-SUBSCRIBERS. Bulk distribution will continue as usual.

In recognition of the widespread usefulness of microcomputers, it is the policy of North Texas State University to encourage their use through planned acquisition and deployment. One potential problem concerning microcomputers, however, is the proliferation of many different brands, making the establishment of effective maintenance and training programs difficult.

In order to insure an orderly acquisition of microcomputers, therefore, and to insure that those acquired will be properly serviced and maintained, the Computing Center has been accorded the following responsibilities:

- It is the policy of the University Computing Center to provide only selected assistance in the development of software for microcomputers. Further, the University Computing Center will not normally provide assistance in the installation, operation, or maintenance of computers which are not within the direct sphere of responsibility of the Center.

- a. Software for the task for which the system is to be acquired should be available from an external vendor or there should be a specific plan established (and funding acquired) for the writing of necessary software.
- b. Unless the system is to be used in a very restricted fashion, it should be equipped with some means for communicating with the University's mainframe computers. Appropriate communication hardware and software must be approved by the Computing Center. It is highly recommended that a RS232 interface be specified at least as an optional item on any bid.
- c. Either the original bid, or a separate statement of justification must specify installation responsibility.
- d. Either the original bid, or a separate statement of justification

must specify appropriate maintenance agreements.

- e. All bids must specify that hardware supplied must be complete with all manuals, cords, cables, etc. required to install and operate the system.
- f. Appeals from the decisions of the University Computing Center may be made to the University Computing Council.

Except in the case of clusters of microcomputers it is assumed that acquisitions will take place through normal budgeting and purchasing procedures without any Computing Center responsibility. With respect to clusters of microcomputers, however, it will be the responsibility of the Computing Center, in cooperation with the several academic departments and colleges, to provide appropriate facilities. A complete statement of the Computing Center's policy and procedure with regard to microcomputers will be available in the Policy and Procedure Manual for Fiscal Affairs being compiled by the office of the Vice President for Fiscal Affairs. The drafts of the Computing Center part of this manual are available at the reception area of the Computing Center, upon request, for your inspection.

~~~~~

## EXPANDING OUR RESOURCES: EDUNET

The purpose of this article is to reiterate the announcement that appeared in the September 1981 issue of BENCHMARKS concerning EDUNET. NTSU is a member of EDUNET, which is a national higher education computer network which provides services through a number of universities across the country. Services are provided by such institutions as Stanford, Yale, and Michigan.

The use of EDUNET is not for everyone. Membership was acquired in order to provide computing services which cannot be provided locally. If you believe that you have a problem which demands computing services not available here at NTSU, please contact Tom Madron, Manager of Academic Computing Services at (817) 788-2324.

~~~~~

PREPARATION UNDERWAY FOR USERS GUIDE

The Academic Computing staff is currently in the process of preparing a users guide to computing facilities at NTSU which should, hopefully, be available in its entirety sometime this semester. The guide is being prepared in sections, each of which will be sold separately. The first section that will be available is called, tentatively, "Dealing With OS/MVT", and it, like all the other sections will be sold in the University Store. BENCHMARKS will announce the sections, their general contents, and their prices as they become available.

~~~~~



## PROCEDURE FOR PROCESSING CLASS L JOBS

All jobs requesting an excess of 512K are subject to the following restrictions. ANY JOB THAT DOES NOT SATISFY THE CONDITIONS LISTED BELOW WILL BE CANCELLED:

1. A Special Handling Card must be completed by the individual responsible for special scheduling the job in the presence of TOM MADRON Manager of Academic Computing, who will then sign it.
2. The completed Special Handling Card must specify amount of Main Storage and estimated Elapsed Execution Time, and must be delivered to the Main Console operator.

Class L jobs can only be processed during periods of low activity, primarily on third shift and weekends.

#####

## NEW VERSION OF WATFIV

A FORTRAN 77 compatible version of the University of Waterloo's WATFIV compiler (WATFIV-S) is now available under OS on the AS/5000. WATFIV-S has been tailored to accept the same control cards currently used with FORTRAN IV compatible WATFIV. The proper compiler is selected through the use of the CLASS parameter on the user's JOB card. WATFIV-S jobs should be submitted with CLASS=5. The older FORTRAN IV compatible WATFIV will continue to be available to users submitting jobs with CLASS=2.

Example job setup:

```
//WATFIVS JOB (XXXX-YYYY,1,2),'USER NAME',CLASS=5
$JOB
    WATFIV SOURCE CODE GOES HERE.
$RUN
    DATA CARDS IF REQUIRED.
$ENDDATA
```

NOTE: THE \$ENDDATA CARD IS NOT NEEDED IF DATA ARE NOT PRESENT.

#####

## SOFTWARE ACQUISITIONS SINCE JANUARY 1981

Following is a list of software that has been acquired by the Computing Center since January 1981, along with the Operating System(s) that it operates under. Some of the items on the list are renewals or updates of software that was already available.

|                                     |                           |
|-------------------------------------|---------------------------|
| ADABAS (MVT)                        | NATURAL (MVT)             |
| COM-LETE (MVT)                      | WATFIV-S (MVT)            |
| Strong-Campbell Interest            | Multi-Dimensional Scaling |
| Inventory (MVT)                     | Package (MVT)             |
| LINPACK (MVT)                       | PRIME (MVT)               |
| BMDP (MVT)                          | Comput-A-Charge (MVT)     |
| VM-CMS Interface (MVT)              | WATERLOO SCRIPT (MVT,CMS) |
| COBOL ANS Version 4 (MVT,CMS,MUSIC) | SAS Release 79.5 (MVT)    |
| SAS/ETS (MVT)                       | SPSS Version 9 (MVT)      |

PASCAL (MUSIC)  
 TEACH (MUSIC)  
 MAIL (MUSIC)  
 Response Time Monitor (MUSIC)  
 Query By Example (CMS)

IIS (MUSIC)  
 TESTER (MUSIC)  
 PSTAT (MUSIC) <on order>  
 PRADE (MUSIC) <on order>  
 VM/SP (VM)

```

* * * * *
*           M U S I C           *
* * * * *

```

### SETTING THE ATTRIBUTES OF YOUR SAVE LIBRARY

A new utility - called SET - to make MUSIC users lives easier is brought to you from the Computing Center, courtesy of Abdi Salahshour. The #SET utility program is designed to change the attributes of a Save Library file which belongs to your library. If you try to place your file in the public library ( PUBL ) and there is already a file with that name in the public library, the given attribute(s) will be ignored and private ( PRIV ) will be assumed. Also, files with the execute-only-owner ( XO(OWN) ) attribute cannot be changed.

#### SYNTAX:

#SET filename=option1,option2,....

Where filename = The name of the save library file. It cannot be an execute-only-owner ( XO(OWN) ) file.

An equal sign (=) must separate the filename from the options.

option1,option2,... = the desired attributes for the save library file, separated by a comma or a blank. The length of the options including the comma (',') and/or blank must not be longer than 50 characters. The valid options are as follows:

| ATTRIBUTES | DESCRIPTION                                                                                                                                    |
|------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| PUBL       | A publicly readable file. Non-owners may read the file, but not modify it. Also, the file is placed in the common index (see COM below).       |
| COM        | The file is placed in the common index, so that non-owners can refer to it without having to include the file's user ID-code in the file name. |
| PRIV       | A private file. Non-owners can neither read nor write into the file.                                                                           |

|           |                                                                                                                                                          |
|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| RD        | Non-owners may read the file.                                                                                                                            |
| RD(OWN)   | Owners may read the file.                                                                                                                                |
| NORD      | Non-owners may not read the file.                                                                                                                        |
| NORD(OWN) | Owners may not read the file.                                                                                                                            |
| WR        | Non-owners may modify (write on) the file.                                                                                                               |
| NOWR      | Non-owners may not modify (write on) the file.                                                                                                           |
| WR(OWN)   | Owners may modify (write on) the file.                                                                                                                   |
| NOWR(OWN) | Owners may not modify (write on) the file.                                                                                                               |
| XO        | The file is execute-only for the non-owners and the owner. Execute-only means that the file may be executed as a program, but not read as data.          |
| XO(OWN)   | The file is execute-only for owners.                                                                                                                     |
| AO        | The only type of write access for non-owners is append. This means that non-owners may add data to the end of the file, but not overwrite existing data. |
| AO(OWN)   | The only type of write access for owner is append.                                                                                                       |

NOTE: If after the equal sign no attribute is given, PRIV will be assumed.

#### EXAMPLES:

```
#SET myfile=PUBL
```

```
#SET XXnn:afile=PUBL,XO
```

```
#SET another.file=RD(OWN) XO
```

#### MESSAGES:

See MUSIC USER'S GUIDE - Version 5.0, Page 324.

#### OBTAINING HELP WHILE LOGGED ON TO MUSIC

A HELP utility program is available in MUSIC which enables a user logged on to MUSIC to request information about the MUSIC system in general or an item about MUSIC in particular. This facility is available when the terminal is in command (\*GO) mode, and is accessible by typing HELP <RETURN>, or HELP item <RETURN>, or HELP item topic topic ... topic <RETURN>. If only the keyword HELP is entered, information about the Editor, such as a one-line description of common commands is obtained. HELP item will cause information about the item listed to be displayed. HELP item topic ... causes more detailed information about the item requested to be displayed. The possible topics are FUNCTION (F), SYNTAX (S), OPERANDS (O), EXAMPLES (E), and MESSAGES (M). If the



information about a particular item requested is not available, the item will be recorded in a system log file which will be reviewed by the MUSIC Timeshare Coordinator daily. In order to obtain a list of the current topic names that may be used on the command-mode HELP command type: HELP TOPICS <RETURN> . The following topics are currently available:

|         |           |         |
|---------|-----------|---------|
| #SET    | #EXCHANGE | APL     |
| CANCEL  | CAT       | DISPLAY |
| DSLIS   | DSREN     | EDIT    |
| EXECUTE | FILE      | FORMS   |
| HELP    | HOURS     | LEARN   |
| LIBRARY | LIST      | MAIL    |
| MUSIC   | NEWS      | OSJE    |
| OSJR    | PROFILE   | PURGE   |
| RENAME  | SAVE      | SCRIPT  |
| STATPAK | STATUS    | SUBMIT* |
| TEDIT   | TOPICS    | UTIL    |

It is also possible to issue a HELP command while in edit-mode. This command is used to obtain information about a particular editor command, or about the editor in general. The topics mentioned above, however, can be accessed only while in command-mode (\*GO). \*NOT NORMALLY USED

#### MUSIC SORT FACILITIES

Don't forget that MUSIC has a variety of sorting facilities available, one which will probably fit your needs. They are:

MNSORT - a generalized disk sorting program which allows you to sort files without writing any program.

SSORT - a routine to sort arrays or tables in main storage; suitable for the smaller sorting requirements.

DSORT - a generalized disk sort subroutine.

SRTMUS - a subroutine similar to DSORT.

COBOL SORT - a disk sort facility that is directly callable from COBOL.

PL/I SORT - a sort facility enabling PL/I programs to call PL/I sort interface subroutines.

As was stated in the description above, MNSORT is the general purpose sort program, which does not have to be called from a program. MNSORT can sort data records into ascending or descending order according to various types of control fields. A description of these control fields can be found on page 427 of the MUSIC Manual, or by entering HELP after typing /EXEC MNSORT.

A detailed description of each of the MUSIC sort facilities can be found in the "Sort Routines" section of the MUSIC Manual, beginning on page 426.

### MUSIC USAGE STATISTICS 1980-1981

The graphs following this article show the usage statistics for the MUSIC operating system since it became available to the general user in October, 1980. The first figure shows that, after a period of slow but steady growth through 1980 and early 1981, the number of user files on the MUSIC disks has begun to increase dramatically. By the end of last semester, there were over 10,000 files saved by MUSIC users. The second figure shows that the growth in the total amount of space consumed by these files has also been substantial. Note that on both graphs, the months of June and September show a sharp decline in the number of files and the amount of space taken up by MUSIC users. These are the times of year when the Computing Center staff purges the MUSIC system of class-related files (and their disk space) that have accumulated over the previous semester. The most important thing to notice, however, is that these "big purges" have not really slowed the increase in the use of the system to a very large extent. Indeed, we at the Computing Center want to encourage the use of MUSIC. At the same time, though, disk space is not an unlimited resource. We urge users to purge their little-used files routinely, or to transfer them to tape (this is easily accomplished through the use of the #EXCHANGE program described in BENCHMARKS, October/1981). These "housekeeping" procedures will insure that the MUSIC disks do not become cluttered with junk files, preventing users from having access to disk space for important class or research projects. (The graphs were produced using PROC PLOT in SAS.)

FIGURE I:

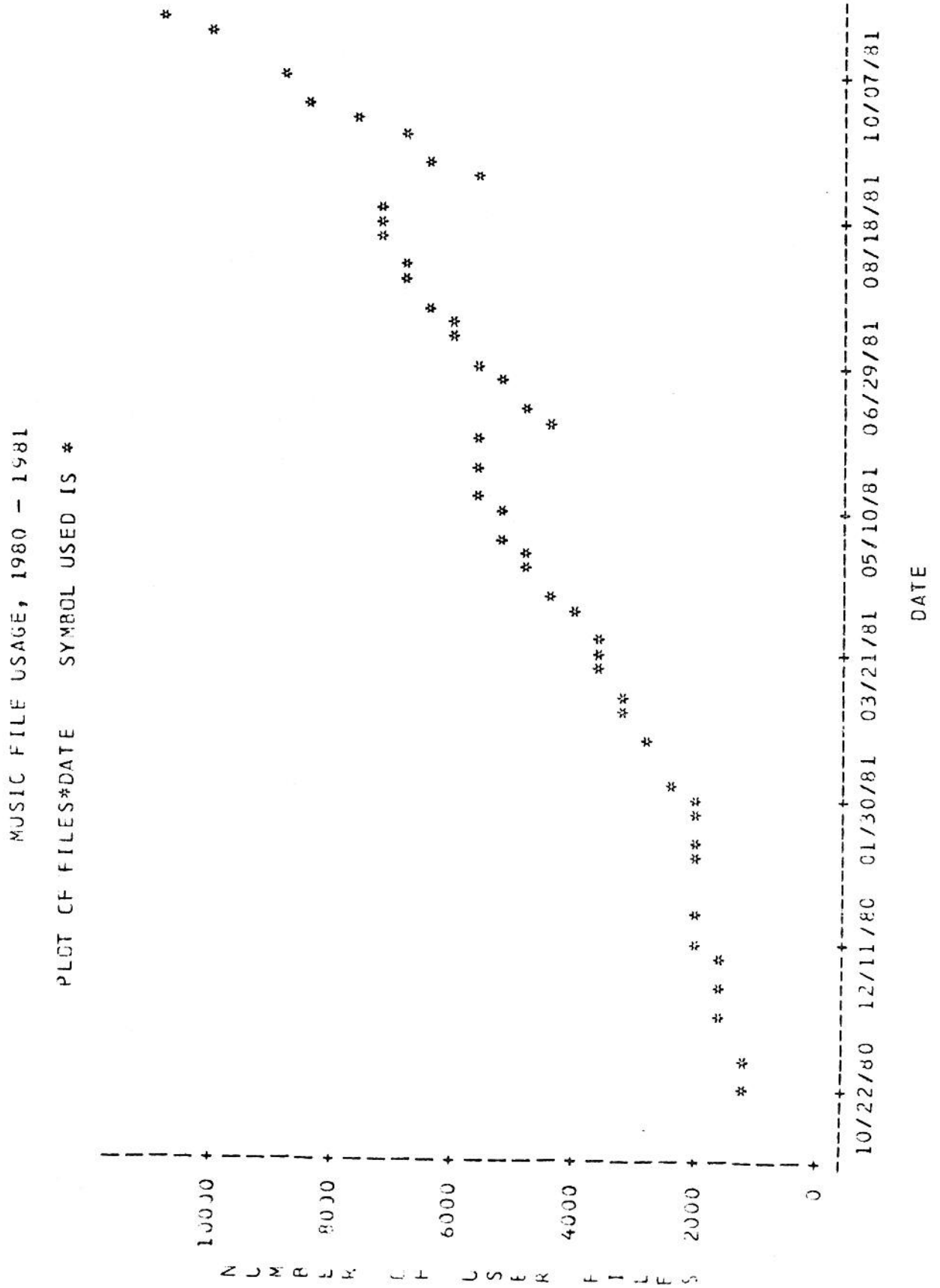
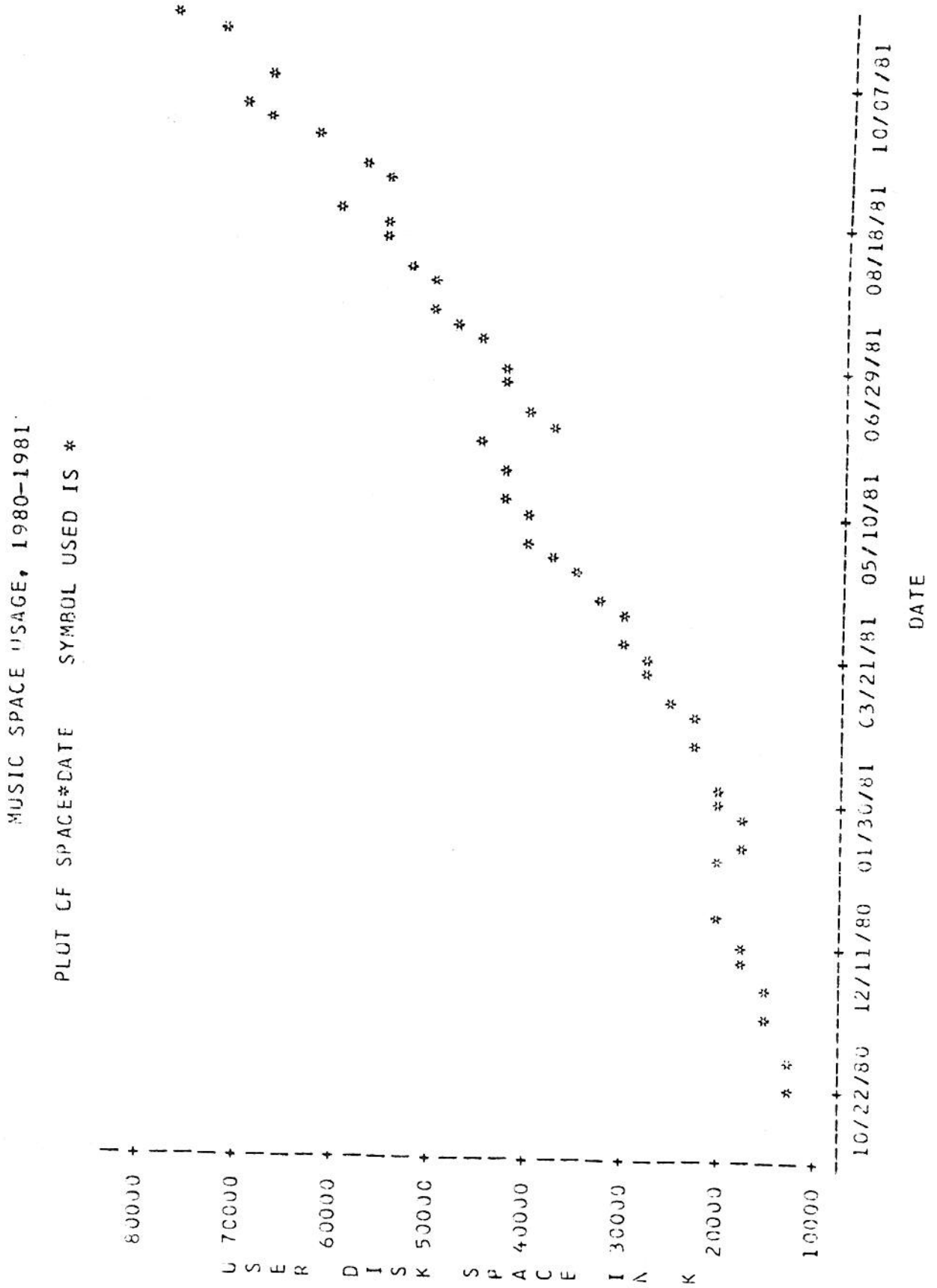


FIGURE II:



```

* * * * *
*           SPSS           *
* * * * *

```

### CORRECTION

Hint #12 in the "SPSS: Enlightenments" article that appeared in the Nov/Dec 1981 issue of BENCHMARKS should not have indicated that two runs were to have been made. The entire set of commands should be executed in a single run.

### PRINTING "VERY, VERY SMALL" NUMBERS

The following question and answer was printed in the November/December issue of Keywords a magazine for users of SPSS INC. software products.

QUESTION: I have a file with very, very small numbers in it. However, with procedures REPORT, LIST CASES, and WRITE CASES in SPSS or CASELIST in SCSS, all I ever get is zero. Is there some way I can force scientific notation output with these procedures so I can see my numbers?

ANSWER: No, but here's a bypass that will work for all these procedures. Assuming the variable you want printed is named X, execute the following statements:

```

COMPUTE      XL=LOG10(X)
COMPUTE      XM=X/10**XL

```

Variable XM now contains the mantissa, and XL the exponent. Write these two variables out next to each other, and it will look like scientific notation, provided that both XM and ~~XL~~ have correct print formats.

### UNDOCUMENTED MANOVA CONVENTIONS

If you would like to receive the simple contrasts which compare each level of a factor to the last in SPSS MANOVA, you must use the statement PRINT=SIGNIF(SINGLEDf) as part of the MANOVA commands. This print statement may be included with the other print statements in the MANOVA command (e.g. PRINT=CELLINFO(MEANS),SIGNIF(SINGLEDf)). This is used in conjunction with the CONTRAST=SIMPLE subcommand.

Repeated measures analysis with MANOVA necessitates the use of the RENAME command (e.g. RENAME=newname1,newname2,newnameN/) to rename the variables. Otherwise, the t values will not have the labels you would expect. This information is not in the SPSS Update Manual, but was received by telephone from an SPSS statistician.



If you have many OS data sets (more than 4 or 5) that you wish to read into a SAS program, and they all have the same format, it is best to concatenate them in the JCL and use one INFILE statement to read them into SAS, rather than using multiple INFILE statements. For Example:

Otherwise, SAS will set aside enough space for the block sizes specified on each of the DD statements, causing you to run out of memory.

PROC FORECAST in SAS can use one of two methods to generate forecasts from time series data, STEPAR or EXPO, which are described in detail in the SAS/ETS User's Guide. What is not mentioned is that if you have fewer than 30 observations, you must use the EXPO method. The STEPAR method requires at least 30 data points to work. The error message generated when this requirement is not met does not really specify what it is that you did wrong. This information is not in the SAS/ETS User's Guide, and was provided by SAS Institute, Inc.

[illegible]

BMDP, a package of statistical programs from the Health Sciences Computing Facility, UCLA, is now available for general use under OS/MVT (a listing of the programs was printed in the Nov/Dec issue of BENCHMARKS). This package is similar in concept to SPSS and SAS, containing a variety of statistical procedures suitable for many applications. It was originally developed for biomedical researchers, and is particularly useful for the analysis of designed experiments. Users who are familiar with BMDP from other installations may note that this is the 1981 version of the package, which has several new

procedures not previously available.

The package contains 40 programs, many of which are similar to those available in SPSS and SAS. Some features which are unique to BMDP include: correlations with options for incomplete data; analysis of two-way and multiway tables, including several measures of association not available in other packages, and log-linear models; several types of cluster analysis; Boolean factor analysis; description and estimation of missing data; all possible subsets regression; derivative-free nonlinear regression; and Box-Jenkins times series analysis. Those interested in analysis of variance may find that BMDP offers programs which are easier to run and provide output which is more readily interpretable than some other statistical packages. BMDP has five different programs for analysis of variance and covariance, including repeated measures.

The program control language for BMDP has some interesting features. Commands are organized into paragraphs, which each relate to a specific program function. The INPUT paragraph, for example, describes the format and location of the input data, while the VARIABLE paragraph describes the features of the variables, including names and missing values. The individual statistical procedures are described in subsequent paragraphs, many of which are unique to those procedures. Each paragraph, in turn, is composed of sentences, which terminate with periods. The format of BMDP commands is quite "loose" compared with other packages. There are no spacing requirements for the commands, for instance, and the words "is" or "are" can be substituted for " = ". These features give BMDP programs a closer resemblance to the English language, and make interpretation by nonprogrammers easy. User's manuals for BMDP are available at the University Store.

The procedure for accessing BMDP is similar to that for the other statistical packages. Following the JOB statement, an EXEC statement initiates the package. This EXEC statement should be of the form //stepname EXEC BIMED,PROG=BMDPxx where xx is the name of the particular statistical program desired.

A short course on BMDP will be offered February 1 and 8, 3-5 p.m. in ISB 231. This course will include information on the program control statements for BMDP, including format statements, variable description and transformations, creating BMDP save files, and handling program options. It will also include further information on job control language. For more information on BMDP or the short course, contact Bob Brookshire at the Computing Center.

#####

#### OFF-CAMPUS COURSES OF INTEREST

Statistical Analysis System - SAS Institute is offering a series of courses throughout the country which may be of interest to some of you rich people out there. They are:

|                           |                 |                |
|---------------------------|-----------------|----------------|
| SAS Basics Course \$350 - | New York, NY    | February 4-5   |
|                           | Raleigh, NC     | February 9-10  |
|                           | Honolulu, HI    | February 22-23 |
|                           | New Orleans, LA | March 10-11    |
|                           | Denver, CO      | March 11-12    |
|                           | Arlington, VA   | March 24-25    |

SAS Advanced Input/Output Course \$350 - Los Angeles, CA March 4-5

SAS Procedure-Writing Course \$350 - Los Angeles, CA March 1-2

For more information contact George Morrow at the Computing Center (817) 788-2324.

Statistical Package for the Social Sciences - SPSS INC. is offering a series of courses on "Using the SPSS Batch System" and "Report Writing With SPSS". The seminar fees for the Batch course are \$495 per individual \$430 for multiple registrants. The seminar fees for the Report course are \$140 per individual or \$120 for multiple registrants. The dates and locations are:

|                  | <u>Using<br/>The SPSS Batch<br/>System</u> | <u>Report<br/>Writing<br/>With SPSS</u> |
|------------------|--------------------------------------------|-----------------------------------------|
| Phoenix          | February 15-17                             | February 18                             |
| Washington, D.C. | April 5-7                                  | April 8                                 |
| San Francisco    | May 17-19                                  | May 20                                  |
| New York         | June 7-9                                   | June 10                                 |
| Chicago          | July 12-14                                 | July 15                                 |

For more information contact Claudia Putnam in the Computing Center  
(817) 788-2324.

[illegible]

## COMPUTER HUMOR

The following is a running dialogue that went on over VM SHARE - a computer conferencing system available to IBM installations with VM Operating Systems. NTSU has a VM Operating System, but it is not a member of VM SHARE, since we are not an IBM installation - only IBM compatible. The files reproduced below were made available to us courtesy of some friends at the University of Kentucky Computing Center.

\*\*\*\*\*  
From: 'CYC at MIT-MC (U of MD Cyclotron Labs)' on Arpanet. . .

Programming announcement released from IBM:

## NEW OPERATING SYSTEM

Because so many users have asked for an operating system of even greater capability than VM, IBM announces the Virtual Universe Operating System - OS/VU.

Running under VU the individual user appears to have not merely a machine of his own, but an entire universe of his own, in which he can set up and take down his own programs, data sets, systems networks, personnel, and planetary systems. He need only specify the universe he desires, and the OS/VU system generation program (IEHGOD) does the rest. This program will reside in SYS1.GODLIB. The minimum time for this function is 6 days of activity and 1 day of review. In conjunction with OS/VU, all system utilities reside in SYS1.MESSIAH. This program has no parms or control cards as it knows what you want to do when you execute it.

Naturally, the user must have attained a certain degree of sophistication in the data processing field if an efficient utilization of OS/VU is to be achieved. Frequent calls to non-resident galaxies can, for instance, lead to unexpected delays in the execution of a job. Although IBM, through its wholly-owned subsidiary, The United States, is working on a program to upgrade the speed of light and thus reduce the overhead of extraterrestrial and metadimensional paging, users must be careful for the present to stay within the laws of physics. IBM must charge an additional fee for violations.

OS/VU will run on any IBM x0xx equipped with Extended WARP Feature. Rental is twenty million dollars per cpu/nanosecond.

Users should be aware that IBM plans to migrate all existing systems and hardware to OS/VU as soon as our engineers effect one output that is (conceptually) error free. This will give us a base to develop an even more powerful OS, target date 2001, designated 'Virtual Reality'. OS/VR is planned to allow the user to migrate to totally unreal universes. To aid the user in identifying the difference between 'Virtual Reality' and 'Real Reality', a file containing a linear record of multisensory total records of successive moments of now will be established. Its name will be SYS1.EST.

For more information contact your IBM data processing representative.

>>>>>> APPENDED 08/08/80 15:14:10 by TYM <<<<<<  
\*\*\*\*\*

#### WARNING TO USERS OF VU:

During the IPL do not respond to the message "SPECIFY SYSTEM COMMANDMENTS" with MOSES. I did, and we were down for forty days and forty nights.

#### OTHER QUIRKS OF INTEREST:

1. Programs don't simplyabend; they nova.
2. A black hole occasionally appears in the supervisor and sucks up CICS. (I thought this was an enhancement, but IBM assures me its a bug.)
3. Great care must be taken to avoid mixing data with anti-data.

>>>>>> APPENDED 04/24/81 16:16:48 BY MKN <<<<<<  
\*\*\*\*\*

#### RUMOR:

It is reported that problem 2, above, is caused, not by software, but by production difficulties with a new part, the light-absorbing diode (LAD). This device, with 2 inputs and no outputs, is rumored to be used throughout the VU system. Some installations are reported to fear that damage from this problem could spread, but an IBM spokesman was quoted as saying,

>>>>>> APPENDED 04/24/81 23:51:56 by STU <<<<<<  
\*\*\*\*\*

Many users of the Virtual Universe operating system have discovered that their 6670 laser printers are now capable of producing output on tablets, thereby increasing the credibility of the reports. This is achieved by using high-intensity attribute bytes instead of the usual



carriage controls. Unfortunately, this practice can have undesirable side effects upon operators, particularly during forms changing and line-up. IBM has announced that it will accede to OSHA demands, and has retained Robert Heinlein, noted author of "Starship Troopers", to assist in the development of proper operator attire.

>>>>>> APPENDED 05/05/81 15:57:04 by MKN <<<<<<<  
\*\*\*\*\*

Another quirk of VU has been discovered. I tried to create a development library, but misspelled the dataset name. It seems that when there is a SYS2.DEVILIB around, everything goes to Hell.

>>>>>> APPENDED 05/07/81 15:53:50 by MKN <<<<<<<  
\*\*\*\*\*

Should that read "another quirk" or "another quark"? ...Joe Morris

>>>>>> APPENDED 05/11/81 12:36:52 BY UNT <<<<<<<  
\*\*\*\*\*

IBM today announced that a new teleprocessing method, the Warped Hyperspace Access Method (WHAM). This spectacular product will soon be available to OS/VU users. The most significant feature being that data transmitted at a given time will arrive at it's destination before it has been transmitted. This is due in part to some of the development work being done by the OS/VU development team while attempting to solve the aforementioned paging problems with non-resident galaxies.

Although the planning for this project has not yet begun, it is expected that the ability to send data backwards in time will result in near immediate availability. IBM plans to transmit this new access method to current users of OS/VU directly from the future.

Specifications will not be available until the product has been fully tested (which means probably never). When asked what communications controller would be used, IBM declined to answer on the basis that they simply didn't know yet.

>>>>>> APPENDED 05/19/81 21:58:34 by MTE <<<<<<<  
\*\*\*\*\*

Announcement of a new network architecture for users of OS/VU:

IBM today announced the development of the Teleporting Network Architecture (TNA) which will replace SNA for users of OS/VU. With this advanced networking capability, telephone lines or satellite communications will no longer be needed. With TNA's revolutionary new molecular protocol, data will be directly beamed between nodes in your network. With the Multi-Planetary Network Facility (MPNF - optional at an additional charge), you may beam data to nodes on different planets and/or galaxies.

"It is is IBM's intention to expand this capability to allow the beaming of operators between nodes, although this is still in the testing phase", the originator of TNA, Carl Sagan, was quoted as saying.

>>>>>> APPENDED 05/21/81 09:58:25 by AMX  
\*\*\*\*\*

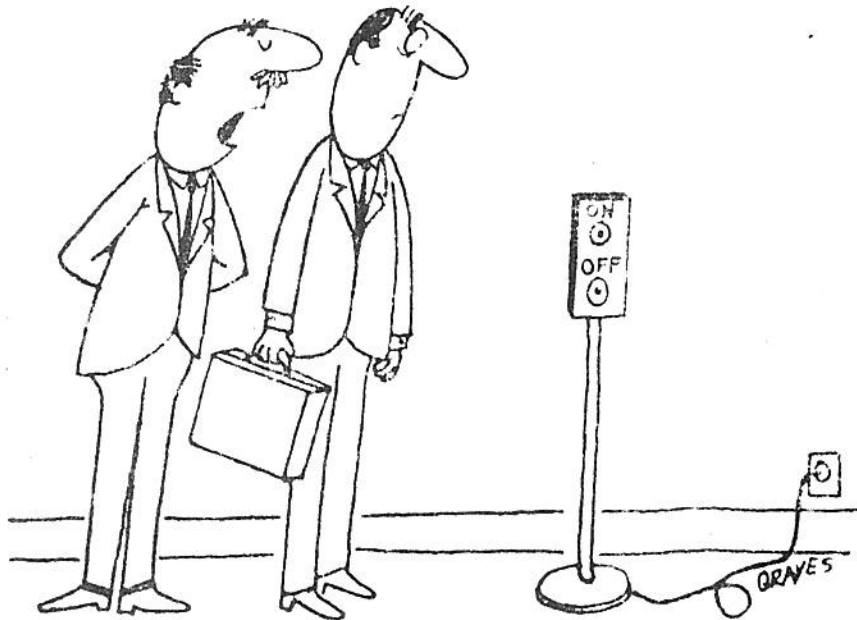
Is WHAM a replacement for ESAM (Extra-Sensory Access Method) ? The

latter is really a headache.

>>>>>> APPENDED 05/22/81 12:29:23 by MKN  
 \*\*\*\*\*

TO MKN: the response that takes the system down for forty days and forty nights is "NOAH". If you specify "MOSES", the system is down for forty YEARS. However, once this period has elapsed, it is no longer possible to specify the "MOSES" option.

>>>>>> APPENDED 06/20/81 05:05:53 by CUN <<<<<<<  
 \*\*\*\*\*



"Of course it's only the basic system"

• DATED: 1981 •



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BENCHMARKS is a vital link between the NTSU Computing Center and the users of our facilities. It is important for all users of the computing facilities to maintain a file of these newsletters because they contain materials which will periodically update existing documents as well as information and suggestions on uses of OS-MVT, MUSIC, the HP-2000, and other resources available to NTSU students and faculty. To facilitate the dispersal of BENCHMARKS, \*\*\* FREE \*\*\* subscriptions are now available. To receive yours, send the following information to us either by "snail mail" (the post office or campus mail) or electronically, through the MAIL facility on MUSIC.

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